Achievement of Market-Friendly Initiatives and Results Program (AMIR 2.0 Program)

Funded By U.S. Agency for International Development

Jordan e-Government Project Review -

Gartner e-Government Strategy & Implementation Plan for the Department of Borders and Residency

Deloitte & Touche Income Tax Department Project

Deloitte & Touche Driver & Vehicle Licensing Department Project

Final Report

Deliverable for ICTI Component, Task No.411.4.3 Contract No. 278-C-00-02-00210-00

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0 Document Control

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0.1 Document History

	Version	Status	Date
	0.1	First Draft	13/12/2002
ſ	0.2	Second Draft	18/12/2002

0.5 Changes From Last Issue

First Draft – Initial Release Second Draft – Appended Sections 2.3 and 3.3

0.6 Acknowledgements

N/A

0.7 Distribution List

This document may be distributed to parties deemed relevant by the Project Management Office of the Ministry of Information and Communications Technology.

0.8 Referenced Documents

The Hashemite Kingdom of Jordan e-		
government Blueprint & Roadmap (version 5, 12 th September 2001).		
Email Statement of Needs GOJ.CONS.ANLS.028.0.2		
Web Applications Assessment GOJ- CONS-ANLS-025-0.4a		
Examples of e-Government	Appendix 1	
EDS SI Task List	Appendix 2	
Roles and Responsibilities	Appendix 3	
Organisational Change Management	Appendix 4	
Programme Organisation Chart	Appendix 5	
EDS Risk Plan for GoJ eGov	Appendix 6	
E-government Portal Website Scope and Vision Document	EgovPortal- ScopeAndVision-v1.0	
Jordan e-Government Risk Assessment Methodology	GOJ-CONS-STRT-038- 1.0	
Jordan e.Government email Statement of Needs	GOJ.CONS.ANLS.028.0.1	
The Hashemite Kingdom of Jordan e- Government Blueprint and Roadmap	Government of Jordan 5	
E-Government Portal and Directory	432.2.1 Portal and Personnel Dir	
Guidelines for E-Government Website In Jordan	eGov-guidelines(look and feel)	
Jordan E-Government Information Security Policy	GOJ-PMO-POLC-024-0.1	
	Email Statement of Needs GOJ.CONS.ANLS.028.0.2 Web Applications Assessment GOJ- CONS-ANLS-025-0.4a Examples of e-Government EDS SI Task List Roles and Responsibilities Organisational Change Management Programme Organisation Chart EDS Risk Plan for GoJ eGov E-government Portal Website Scope and Vision Document Jordan e-Government Risk Assessment Methodology Jordan e.Government email Statement of Needs The Hashemite Kingdom of Jordan e- Government Blueprint and Roadmap E-Government Portal and Directory Guidelines for E-Government Website In Jordan Jordan E-Government Information	Email Statement of Needs GOJ.CONS.ANLS.028.0.2 Web Applications Assessment GOJ- CONS-ANLS-025-0.4a Examples of e-Government EDS SI Task List Roles and Responsibilities Organisational Change Management Programme Organisation Chart EDS Risk Plan for GoJ eGov E-government Portal Website Scope and Vision Document Jordan e-Government Risk Assessment Methodology Jordan e.Government email Statement of Needs The Hashemite Kingdom of Jordan e-Government Blueprint and Roadmap E-Government Portal and Directory Guidelines for E-Government Website In Jordan E-Government Information

0.9 Abbreviations

0.10 Glossary

N/A

1 Documents Reviewed

1.1 Gartner e-Government Strategy & Implementation Plan for the Department of Borders and Residency

All documentation that has been provided by MoICT that relates to the E-Government Strategy and Implementation Plan for the Department of Borders and Residency project including:

- Organizational Readiness Assessment
- Implementation Plan
- Process Strategy
- Dataflow Chart
- Scope Document
- Organizational Strategy
- Draft Service Scope
- Technology Strategy
- Process Analysis Document
- Sequential Process Steps
- Process Improvement Spreadsheet
- Service Process Analysis Spreadsheets
- Process Analysis and Prioritisation Workshop Presentation

1.2 Deloitte & Touche Income Tax Department Project

All documentation that has been provided by MoICT that relates to the E-Government Strategy and Implementation Plan for the Income Tax Department project including:

- Analysis Phase Report
- Design Phase Report

1.3 Deloitte & Touche Driver & Vehicle Licensing Department Project

All documentation that has been provided by MoICT that relates to the E-Government Strategy and Implementation Plan for the Driver & Vehicles Licensing Department project including:

- Analysis Phase Report
- Design Phase Report

2 General Observations - Alignment of Documents to MolCT e-Government Technology Policy

2.1 Gartner e-Government Strategy & Implementation Plan for the Department of Borders and Residency

MoICT 3 year Project Plan — Many items included within the associated deliverables have been discussed within GoJ e-Government forums but have not been formally planned for. For example, within the Technology Strategy Report the implementation of a PKI based solution in Phase 3 is stated as a known fact, this has not been planned formally and is subject first to an analysis period to investigate the most suitable form of identity, authentication, authorization and non-repudiation process/solution. This has yet to be agreed. Unfortunately the associated deliverables have had to make certain assumptions however many of these are flawed because MoICT have yet to produce a detailed long term plan that identifies the what, when and how of each step of the national e-Government program is to be carried out particularly the common components to be provided to all government ministries. If the greatest value is to taken from such consultancy engagements, then the Government through MoICT in this instance must be prepared and in a position to understand effectively the direction and plan of implementations to which the e-Government program is working.

Publication Of Common Standards, Policies and Procedures – MoICT must introduce a formal mechanism whereby all common standards, policies and procedures are disseminated to all relevant government ministries. The implementation of a GoJ intranet should ease this process. Policy documents such as the Information Interoperability Framework, Information Security Policy and such like have not been distributed throughout the Government of Jordan. This reduces the level of knowledge within government as to the manner in which the e-Government program is being implemented. With the increased pace of e-Government implementations from 2003, it is imperative that all assistance is provided to relevant agencies to ensure that best practice is being advocated and also to ensure that work completed by the MoICT is being correctly leveraged across government. The first exaple of the next set of polices and procedures to be rolled out relates to the SGN and email and content management system Phase 1 rollouts, all relevant documentation should also be distributed to all interested government departments to assist with their implementations. A further area of consideration that could be of immediate benefit to DoBR would be a set web/application development guidelines. This might encourage DoBR to migrate its current applications development from a 2tier framework to an n-tier framework, this being easier for integration purposes.

<u>Communicate MoICT Functions & Capabilities</u> – MoICT via the PMO is providing numerous support functions with regard to the e-Government initiative, such as governance, subject matter expertise, project management, etc. MoICT must ensure that the MoICT work charter is communicated to and understood by all relevant government agencies. For example, DoBR have been advised to establish a governance council to support the implementation of DoBR related services. It will ensure that all funding disputes are managed, ministries doing 'solo runs' in contravention of required integration policies and IT standards are corrected,

proposals without clear business cases are halted, disputes over power and responsibilities for cross-Ministerial initiatives (particularly in MOI, GID and DoBR interactions) are resolved, lack of accountabilities for achieving projected benefits are clarified, inadequate attention to providing a comprehensive framework for security and continuity planning and inadequate project management is resolved. MoICT must play a key role in this exercise and this is simplified if DoBR is aware that MoICT can fulfil these functions. DoBR shall also require advice and consultancy with regard to both process re-engineering and application development (n-tier component based service architectures).

Phase 2 SGN and Messaging Projects – DoBR have a requirement for the provision of a communications layer so that they can communicate with all its inter agency partners such as the Ministry of Interior. Within the associated deliverables, it has been recommended that a stand-alone network separate to the SGN be implemented. This might be prohibitive due to cost constraints. MoICT must discuss the potential of providing this service component to DoBR et al, the core issue here relates to security concerns that DoBR would have. These shall have to be addressed prior to any agreements being reached. DoBR et al also require a messaging service, however in this instance DoBR have been advised to use the MoICT messaging solution. Thus it is simply a case of MoICT planning the successive phases of the SGN and messaging rollouts to identify when both SGN and email connectivity will be made available to DoBR et al. This must be completed as soon as possible.

<u>DoBR e-Service Driven Components</u> – As a result of the data gathering exercises undertaken with respect to this project, a number of common components have been identified that might be implemented at the central level. These are a document management system and an automated email response management system. Both should be analysed to investigate whether they might be added to the MoICT 3 year project plan and if so should be formally planned in conjunction with DoBR et al.

<u>Analysis Criteria and Prioritisation</u> – The analysis criteria and scoring mechanisms for DoBR services being analysed were different to those agreed within the MoICT Data Centre Framework document that has subject to one exception been agreed.

2.2 Deloitte & Touche Income Tax Department Project

MoICT 3 year Project Plan – Many items included within the associated deliverables have been discussed within e-Government forums within Jordan but have not actually been formally planned for. For example, within the Design Phase Report the implementation of a PKI based solution in Phase 3 is stated as a known fact, this has not been planned formally and is subject first to an analysis period to investigate the most suitable form of identity, authentication, authorization and non-repudiation process/solution. This has yet to be agreed. Unfortunately the associated deliverables have had to make certain assumptions however many of these are flawed because MoICT have yet to produce a detailed long term plan that identifies the what, when and how of each step of the national e-Government program is to be carried out particularly the common components to be provided to all government ministries. If the greatest value is to taken from such consultancy engagements, then the Government through MoICT in this instance must be prepared and in a position to

understand effectively the direction and plan of implementations to which the e-Government program is working.

<u>ITD Project Plan</u> – No ITD specific project plan has been prepared within the associated deliverables, this would be very beneficial to all parties involved to provide clarity on the general ITD approach. Also many budgetary estimates have not been completed within the Implementation Roadmap section, these figures even only if representative are essential to help ITD assess the total cost of this initiative.

<u>ITD e-Service Driven Components</u> – As a result of the data gathering exercises undertaken with respect to this project, a common component has been identified that should be implemented at the central level. This is a calendaring system solution that might be simply a front-ended version of the Microsoft Exchange calendaring functionality, but this must be determined at a later point. A calendaring solution should be added to the MoICT 3 year project plan.

<u>Departmental Identification, Authentication and Authorization Solution</u> – The solution proposed within the associated deliverables and summarized within Section 9.8 of the Design Phase Report is quite vague and cannot be considered a complete design, thus this requires further work before being considered complete. Also it must be ensured the complete cycle is covered within the final solution, that is registration, identification, authentication, authorization and administration.

<u>G2B Gateway</u> – It is stated clearly within the associated deliverables, specifically Design Phase Report, Section 4, that there is a requirement for ITD for the introduction of a central component of a G2B gateway. However this requirement is never supported within the associated documentation thus it is unclear as to which ITD service that this component is critical for. It is mentioned that is a dependency for the implementation of project PIII.6, but no business benefit are given as to why. This must be clarified prior to agreeing to include this within the MoICT project plan and implementation schedule.

<u>Inappropriate Product and Corporate Name Dropping</u> – A disclaimer within the associated documentation clearly states that all products and corporations are mentioned only as examples. However in the context of such a report, it is very difficult to separate examples from recommendations when such a report is distributed to a greater audience. MoICT must ensure that reports are appropriate in the manner in which examples are used, perhaps on each occasion of an example it is clearly noted that an example is being made.

<u>Provision of Hosted Email Account</u> – It is recommended that email accounts are provided via the data centre to authorized users as per Section 9.6, Design Phase Report. This decision requires considerably greater analysis prior to be agreed as an approach that is acceptable to MoICT. Alternate approaches that have been used in other governments is the delegation of the provision of email facilities and the associated security concerns to the authorized user. This is a very cost effective method of ensuring 2 way email communication with service users.

<u>Knowledge Management Solution</u> - Many of the deliverables being focused upon within the associated deliverables relate to the development of increased level of

service quality. This specifically relates to the development of a customer services organization, then continues to the formation of a call centre and finally relates to the establishment of customer relationship management within the ITD. However at no time is there any mention of the development of a knowledge base solution. It is critical to introduce a knowledge management solution to ensure the standard delivery of customer service within any organization and as such would be of great benefit to ITD here.

<u>Legacy Systems</u> - Front-end web based services have been considered exclusively within these deliverables. No back end services have been considered, this is worrying to some extent because within the Design Phase Report no mention is made of any legacy systems. By this I mean that no capacity concerns, integration issues, etc have been raised, and as this shall probably be the area of greatest difficulty this is a critical omission.

<u>Channel Strategy</u> – Many assumptions have been made within the associated deliverables, such as the assumption that Post Offices might be used as a form of community service station for e-Government (Section 1.2, Design Phase Report), SMS gateways being introduced during Phase 2 of the e-Government initiative. A complete channel strategy must be completed at the central level, that is MoICT, at a very early stage. This is a perfect example of the type of common component that may be provided centrally at reduced cost to multiple government agencies.

External Call Centre (G2C and G2C Services) — Within the associated deliverables it is forecast that a call centre can be provided by ITD themselves, that is project PII.10. Furthermore it is posited within these deliverables that ITD should implement their own internal CRM solution. A disclaimer is put against both these projects by stating that they should be provided centrally but only if available if a timely manner, i.e. when necessary for ITD purposes and project plan. This is not the manner in which the e-Government program can be implemented, MoICT must announce specifically which common components that they intend to introduce and provide related implementation timeframes. This shall ensure the economies of scale are assured, that implemented components can be properly leveraged, expertise is available from a central point and ensures that no wasteful investments are knowingly made.

Content Management Meta Data Standards – The associated deliverables clearly identify a number of areas that require the publication of common standards, guidelines and procedures governing the use of common components from the central entity, that is MoICT. It must also be recognized that certain standards have been developed and should be recognized as such to ensure that they are adhered to, one clear example of this relating to Phase 1 projects to be implemented is project PI.6. It must be ensured that any/all work undertaken with regard to content harvesting here ensures that all relevant metadata is also collected adhering to the Dublin Core standard.

<u>Analysis Criteria and Prioritisation</u> – Scoring is not transparent, also the scoring mechanisms are different to those agreed within the MoICT Data Centre Framework document that has subject to one exception been agreed.

2.3 Deloitte & Touche Driver & Vehicle Licensing Department Project

Many sections that were of particular interest to and have significant impacts on the MoICT were copied from the previous report verbatim so all general comments that have been made above are re-iterated here also. However a number of alternative considerations have also been identified and these are listed below:

No BPR Completed – DVLD are intending to initiate the implementation of the selected e-services without completing a BPR of selected services, this is in contradiction to the approach that has been adopted by the PMO within the MoICT. This is a very worrying approach, as a poor service e-enabled shall remain a poor service. Selected services should undergo a proper BPR prior to implementation.

Integration and Consolidation of DVLD Applications and Databases — A critical component for revolutionizing DVLD for e-government is the consolidation and integration of their information assets. This is a very difficult and challenging task, system integration of this type is often a very complex task. However no recommendation has been detailed within the report as to how this might be achieved. Also no consideration of the diverse legacy systems within DVLD and associated government agencies are given within any of the proposed architectures. This is an oversight on the part of the report that should be addressed as the report rightly concedes that back office systems are equally if not more important than the front office systems for the implementation of e-Government within DVLD.

<u>Legacy Systems</u> - Front-end web based services have been considered exclusively within these deliverables. No back end services have been considered, this is worrying to some extent because within the Design Phase Report no mention is made of any legacy systems. By this what is meant is that no capacity concerns, integration issues, etc have been raised, and as this shall probably be the area of greatest difficulty this is a critical omission. For example within Section 8.1.6.1, it is stated that wanted vehicles list must be checked however no further information has been provided. This is an oversight that must be addressed.

<u>Interaction with Portal & Web Site Teams</u> – It is suggested that Sections 9.1 and 9.3 be shared with the IQC firms working on the portal project, particularly the G2G teams. This would ensure that a common view to the type of information being required at the departmental level is visible to that at the central level.

<u>Network Implementations for Dependent Government Agencies</u> – The report recommends a number of implementations of communications between dependant government and non-government agencies to DVLD. MoICT must consult with DVLD on the most efficient manner in rolling out these connections, considering the breadth of solutions from connection to the SGN, VPN connectivity through the data centre, etc.

<u>DVLD e-Service Driven Components</u> – As a result of the data gathering exercises undertaken with respect to this project, a common component has been identified that should be implemented at the central level. This is a calendaring/scheduling system solution that might be simply a front-ended version of the Microsoft Exchange calendaring functionality, but this must be determined at a later point. A calendaring solution should be added to the MoICT 3 year project plan.

<u>Provision of Supporting Metrics</u> – No metrics to support selected services to be eenabled have been provided. It is a recommendation within the report that all potential benefits to be given as a result of introducing e-services be measured. However no metrics of services that were analysed have been provided, these should establish the current baseline of service levels to date. Section 5.4 of the Analysis Phase Report might serve as a starting point for these performance measures.

3 Specific Observations - Alignment of Documents to MoICT e-Government Technology Policy

3.1 Gartner e-Government Strategy & Implementation Plan for the Department of Borders and Residency

During the review phase of this project, a number of key deliverables were identified that had specific implications for MoICT and the national e-Government program. Thus these have been detailed for an thorough review below:

Report	Section	Page	Modification (A - Add, D - Delete, C - Change, Co - Comment, Re - Recommendation)	Description
Org'al Strategy	2.1	4	Re	It is highlighted that a governance council must be formed to support the implementation of DoBR related services to manage funding disputes, ministries doing 'solo runs' in contravention of required integration policies and IT standards, proposals without clear business cases, disputes over power and responsibilities for cross-Ministerial initiatives (particularly in MOI, GID and DoBR interactions), lack of accountabilities for achieving projected benefits, inadequate attention to providing a comprehensive framework for security and continuity planning and inadequate project management. MoICT must play a key role in this exercise.
	2.2	7	С	It is recommended that a service manager is appointed for each service. It is also critical that MoICT supports DoBR et al throughout the service lifecycle from design to support.
Process Strategy	1	1	4	Many elements of organizational change are recommended here including delegation of authority, cross organisational teams, alterations to working practice, etc. Thus it is essential that MoICT assist DoBR with its change management SME.

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2	7	Со	It is suggested that DoBR related services should aim to reduce the duplicate collection and storage of information. This may be achieved through the implementation of a shared database. If a shared database is to be implemented, multiple agencies shall have to be able to access this thus requiring certain integration services that are planned to be provided by MoICT. MoICT must coordinate the implementation of an integration broker and messaging middleware solution with DoBR et al.
2	7	Со	It is recommended that electronic documents are adopted by DoBR et al to improve process efficiencies. This functionality is supported by document management solutions that may be provided as a central component, MoICT must investigate if they wish to assist with the provisioning of such functionality.
2	7	Со	Increased correspondence using electronic mail is proposed as fundamental to executing key process improvement within DoBR et al. The Phase 2 email rollout must consider these entities for inclusion due to the overlap with both projects and associated dependencies.
2	7	Со	Electronic payment is also highlighted to improve the manner in which fee and fine collection is exercised by DoBR et al, and is recommended to be provided by a central authority, i.e. MoICT. Thus MoICT must also liase with DoBR et al as to when this component shall be provided.

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	2	7	Со	A long-term recommendation made relates to the introduction of smart cards for foreign nationals and then by extension to nationals to support the [process improvement to enable higher levels of service being delivered by DoBR. MoICT must liase with DoBR on these plans.
	3	11	Re	The selection and prioritisation criteria used to nominate services for implementation are different to those agreed within the MoICT Data Centre Framework document that has subject to one exception been approved.
Technology Strategy	1	6	Со	3 potential approaches are suggested to DoBR cross agency processes, two of which require connectivity to external ministries. Although the SGN is not recommended as the communication mechanism of choice, MoICT should discuss the option of utilizing the SGN as the transport mechanism for connectivity in support of the ABCS application.
	1	6	Re	The creation of a PSD owned, shared database for foreign national identification information is suggested, and shall be called the FID dB. A shared service component should be created leveraging this unique data source for all government agencies requiring information on nonnationals in Jordan. MoICT should assist with the development of this service.
	2	10	Re	The architecture recommends 2 discrete networks—the SGN and the SENS. The SENS seems to be based on the new departmental PSD network. Thus the new network currently does not exist, thus MoICT should enter discussions with PSD, DoBR, etc. so investigate if the SGN could provide the required functionality.

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	2.3	13	Со	A business process manager (BPM) solution is recommended for DoBR, this functionality has been determined a ministry/service specific component and thus is a departmental responsibility.
	2.3	15	С	The architecture recommends a gateway be established at the interface of the SENS and SGN but no real functional depth is given to the gateway. This needs to be provided.
	2.5.2	19	Со	A component-based architecture/framework has been advised for the departmental service implementation.
	2.5.3	20	Re	DoBR are currently developing new applications based on a 2 tier architecture, this does not adhere to above recommendation and would increase the complexity of integration issues.
	2.5.5	28	Со	Specific technology is recommended for departmental/service BPM tool, a combination of Oracle Workflow and Oracle 9iAS Interconnect module.
	3.1	31	Со	It is recommended that MoICT federated email component is suitable for DoBR requirements, described as the most pragmatic approach.
	3.2	34	Re	An email response management solution is suggested for implementation at the departmental level by DoBR et al, this would require MoICT assistance as MoICT manages the email infrastructure. MoICT might also consider providing such software as a central common component to all government agencies providing email communications for services. MoICT should liase with DoBR on this issue.

	3.3	36	Re	Collaborative technologies are posited as beneficial to DoBR et al, both for process support and real time interaction. MoICT should investigate providing this type of functionality as a common component via the federated architecture. MoICT should liase with DoBR on this issue.
	3.4	39	Re	A document management system is also recommended for implementation within DoBR et al to assist with the adoption of edocumentation. MoICT might investigate providing this type of functionality as a common component via the federated architecture. The relationship with FileNet (provide CMS common component) might be leveraged also as this company is provides document management solutions. MoICT should liase with DoBR on this issue.
	4	43	Re	The development of technology supporting policies and processes are recommended, MoICT must set up a point of contact to liase on this common issue.
	4.3	46	Re	An email policy is recommended, MoICT must disseminate policies as they are completed for the Phase 1 rollout so that DoBR et al might familiarise themselves.
	4.4	46	Re	An Information Security Policy at the departmental level is recommended, MoICT must assist DoBR with the development of PSD, DoBR, etc. policies.
	4.4.2	49	Re	With respect to the proposed DoBR networking architecture, any external point of contact to the Internet should occur via the MoICT data centre.

4.4.2	49	Re	With regard to the network architecture, MoICT should share standards, polices and procedures that are developed during the implementation of the Phase 2 of the data centre, this would include firewall policy, VLAN policies, server hardening policies, IDS policies, etc.
4.4.2	50	Re	With respect to the proposed Transaction Zones and Remote PSD locations, MoICT might discuss with DoBR the utilization of the SGN VPN remote access solution to provide for DoBR's and PSD's remote access requirements.
4.4.2	51	Re	It is suggested that DoBR might establish a Security Entities PKI for the authentication and certification generation for DoBR servers. If DoBR progresses this idea, this infrastructure might be leveraged across government, e.g. it would remove the need for Verisign to provide certificates for the front-end MS Exchange servers for Phase 1 SGN and email project.
4.5.2	59	Со	It is recommended that DoBR migrate from the current operating system OpenVMS to UNIX or Linux.
4.6	62	Со	It is suggested that in the longer term the development of a metadata repository for all interface points should be under the remit of the MoICT's "schema czar", this would be the individual responsible for the IIF.
4.7	62	Re	It is recommended that DoBR et al support the centralized CMS and portal, but it also reflects that DoBR et al will also support a departmental web site. MoICT must ensure that the central CMS provides sufficient flexibility for departmental web sites to be maintained individually via the FileNet CMS.

	5.1	69	Со	A government wide approach to CRM is posited, to provide DoBR with required functionality. MoICT is thus by default supported as owners of this process and as such should take formal responsibility for this function.
	5.2	70	Со	A number of further common components are identified that have been designated the responsibility of MoICT, these are the provision of directory services, identification and authentication services and e-Payment services.
Services Delivery	1	3	Со	It is proposed that the focus be given to telephone and physical access channels for reasons of pragmatism and to the Internet for e-Government visibility. It is also that prior to selection and implementation of further channels, further analysis is required.
Strategy	2	4	Со	It is stated that DoBR require call centre functionality for service delivery and that will require a centralized CRM function and possibly call centre functionality also to be provided centrally.
Org'al Readiness Assessment	2.3	7	Re	It is clearly stated that prior to implementation of selected services, legal changes will have to be made, including organisational, service authentication and e-payment related. MoICT can assist with developing these themes through its in house expertise.
	2.6	17	Re	It is stated that DoBR et al seek to implement military level security, thus MoICT must ensure that security for common components is of a high enough level so that it shall be acceptable to DoBR, e.g. SGN.

	2.6.2	19	Re	Current DoBR applications are only accessible externally by accessing the databases directly. This will cause issues when automating cross agency services. DoBR et al must be encouraged to move to component based builds. This might be achieved by the generation of web/application development guidelines by MoICT.
	2.6.3	22	Co	A new TCP/IP based PSD network is being developed and is to be implemented soon. MoICT must understand how the SGN is to interface with the PSD network/
	2.6.3	23	Со	Good capacity planning guidelines have been provided that might be useful for SGN project consideration.
	3.3	11	Re	The recommended SENS for DoBR et al si suggested to be built upon the PSD network, however this has yet to be developed and as such the SGN might fulfil all requirements as the communication mechanism. MoICT must liase with DoBR on this issue.
Implement' Plan	3.3	11	Re	It is recommended that DoBR implement both a Business Process Manager and Integration Broker as part of the SENS rollout. However MoICT shall provide both an Integration Broker and Messaging Middleware component services as part of their federated architecture centrally. MoICT must share its plans for e-Government with all relevant ministries.
	3.3	14	Со	DoBR have been advised to conform to all MoICT developed standards, polices and procedures. This can only occur if all relevant information is disseminated to DoBR et al as it is developed.

3.2 Deloitte & Touche Income Tax

All relevant outputs that shall impact MoICT were contained within the Design Phase Report and as such this has been the focus of revisions that are suggested at this point.

Report	Section	Page	Modification (A - Add, D - Delete, C - Change, Co - Comment, Re - Recommendation)	Description
Design	1.2	15	С	Reference to post offices is unclear
Phase Report	1.2	16	D	Project CII.2 – the implementation of an SMS gateway, this project has not been formally scheduled and as such this should be deleted
	1.2	17	D	Project CIII.1 – the implementation of PKI based security infrastructure, this project has not been formally scheduled and as such this should be deleted
	1.2	17	D	Project CIII.4 – the implementation of a B2G gateway, this project has not been formally scheduled and as such this should be deleted
	1.2	17	D	Project CIII.5 – the implementation of a voice gateway, this project has not been formally scheduled and as such this should be deleted
	4	49	Со	It is recommended that ITD investigate the hosting of departmental resources at the data centre
	5	51	С	The phasing model that is used for common component projects are incorrect, these have to be revisited. For example integration service are now to be provided in Phase 2.
	7	96	С	If as is recommended later in this report, the central CMS is utilised to publish the ITD static website then the web servers will be under central control nit ITD control.
	7	102	D	The component functional requirements section is very confusing and adds little, for example the requirement for the portal to provide personalization or community based services (message boards). No business requirement is given as to why many if not all these functions are critical to ITD and as such these decisions must be taken only at the central level and not at the departmental level.
	7	112	Со	J2EE framework is explicitly recommended for implementation with the ITD.

	8	118	С	Project PI.2 – establishing a connection to the SGN, is given as the responsibility of ITD. This is not the case as the Phase 2 rollout of the SGN to further ministries is to be managed by MoICT and thus is a centrally controlled project.
	8	119	С	Project PI.3 – deployment of email clients, is given as the responsibility of ITD. This is not the case as the Phase 2 rollout of email to further ministries is to be managed by MoICT and thus is a centrally controlled project.
	8	119	С	Project PI.4 – establishing infrastructure for public Internet website, is given as the responsibility of ITD. This is not the case as it is recommended within the report to leverage the centrally provided CMS and as such the ITD will also have to leverage the web server that is inherently linked with the CMS solution.
	8	121	A	Project PI.6 – design/develop a static website for ITD, omits to mention a critical dependency. MoICT must have published all relevant web guidelines, look and feel standards, information architecture, metadata standards, etc. This must be added. ITD must adhere to metadata standards, minimally this will ensure it can leverage common search engine.
	8	123	С	Project PI.8 – implement the management of General Inquiries Services, does not specify any costs or any associated software implementations. It would be essential to introduce some form of knowledge base to ensure standard, exact, prompt, etc responses to inquiries.
	8	135	С	Project PII.12 – implement departmental CRM system, is given as the responsibility of ITD. This is not the case as multiple implementations of CRM solutions across government is not cost effective particularly at smaller departments such as ITD

8	137	Со	Project PII.13 – implement payment of taxes via EFT, a slight concern exists with regard to lack of information about legacy ITD revenue and accounting systems. This should be more extensive.
8	137	Со	Project PII.14 – implement payment of refunds via direct deposit, must consider the involvement of the Central Bank and not exclusively focus upon a single private bank - Housing Bank.
8	142	С	Project PIII.5 – migrate existing online applications to PKI based security, this is a bit presumptuous at this time, as no formal implementation of PKI at the central level has been agreed to date.

3.3 Deloitte & Touche Motor Vehicles

The vision statements addressed above guides the development of strategy of an organisation and sets direction. It also provides frame of reference and guides short-term actions. Particularly of interest is the fact that it may be used to set performance goals.

Report	Section	Page	Modification (A - Add, D - Delete, C - Change, Co - Comment, Re - Recommendation)	Description
Design Phase Report	1.2	18	Со	It is recommended that area web cameras be provided for DVLD service halls, this suggestion should be supported by a business case as opposed to implementing simply to showcase web technology.
	1.2	19	С	Within this table, the infrastructure section for Phase 2 identifies a CRM package with workflow. This should be explained in more depth.
	1.2	19	С	Within this table, the infrastructure section for Phase 3 identifies a PKI based security services. This direction has not been formally set by the MoICT to date and thus cannot be considered a concrete direction.

	1.2.2	21	Со	The report recommends the establishment of e-Gov centres throughout Jordan. This must e managed by MoICT as the central authority and should not be defined as departmental strategy.
	1.2.3	22	С	The report cannot recommend changes to delivery channels within the private sector. DVLD will having difficulty forcing insurance companies to provide insurance contracts online.
	1.2.5	24	С	Project PII.9 and PII.20 must both be considered central functions and should not be managed on a departmental basis.
	1.2.6	24	Со	Consultations should occur with MoICT prior to project PII.21 being implemented, certain SGN functionality might be leveraged for this purpose.
	3.1	43	Со	A wide array of access channels are recommended, some measure of channel appropriateness should be considered. Some form of cost justification/business case should be established prior to reaching consensus on DVLD channel strategy.
	3.5.1	52	С	The report highlights a lot of generic information about the financial sector in Jordan, specifically banking institutions. However no background info is provided for insurance companies, this is unacceptable some of the recommended services that directly impact upon the insurance sector.
	4.1	60	Со	Electronic forms are recommended to be implemented, this type of service should be considered for implementation as a common component at the central level.
	4.3	60	Со	It is suggested that DVLD might consider the data centre as an option for hosting their web applications. MoICT must be prepared for this eventuality.

4.4	61	Со	The report advocates the consideration of IT outsourcing, MoICT, must be aware of this potential development. Perhaps they might provide advice and consul.
5	63	С	The highlighted phasing of common components within the report is inconsistent with MoICT's present formal plan.
5	63	Co	It is recommended that email accounts be provided via the data centre to authorized users. This decision requires considerably greater analysis prior to be agreed as an approach that is acceptable to MoICT. Alternate approaches that have been used in other governments is the delegation of the provision of email facilities and the associated security concerns to the authorized user. This is a very cost effective method of ensuring 2 way email communication with service users.
5	63	С	The report authors have misunderstood the federated architecture terminology, specifically the difference between a common component and a common service.
5	63	С	Two common components currently not recognized by MoICT are identified in the report, these are calendaring and notifications.
6.1.5	73	Со	The potential to introduce a central component to provide electronic forms provisioning must be carefully considered by MoICT as this might lead to technology policy being set by MoICT with regard to departmental application development.
6.1.6	74	Со	The report advises for the implementation of an appointment scheduling service, this must be included via the calendaring functionality that should be provided centrally possibly via Outlook calendaring functionality.

	6.1.7	75	Со	Again a common component currently not recognized by MoICT is identified in the report, this is a notifications system.
	6.1.7	75	Со	It is recommended that email accounts be provided via the data centre to authorized users. This decision requires considerably greater analysis prior to be agreed as an approach that is acceptable to MoICT. Alternate approaches that have been used in other governments is the delegation of the provision of email facilities and the associated security concerns to the authorized user. This is a very cost effective method of ensuring 2 way email communication with service users.
	6.1.7	75	Со	A proper analysis of delivery channels must be completed as numerous channels are recommended for implementation without a business case being built for each, these are email, SMS and fax.
	6.1.8	77	C	The back end legacy capability (financial and accounts receivables) of DVLD systems is not detailed prior to making design decisions, this must be addressed to ensure validity of technical directions proposed.
	6.1.11	85	Co	The temporary solution proposed at this point is quite intensive on customers, i.e. receiving two receipts and forwarding one the departmental entity for validating payment (2 interactions that had previously been 1). This must be evaluated prior to implementation.
	7.1	86	С	The IT system proposed to be developed to support the technical check out process. This is not defined in detail later either when discussing PII.22. This system requires further clarification.

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	7.2	87	С	As above with regard to the IT system proposed to be developed to support the medical check out process.
	7.4	89	Со	The report proposes that insurance companies provide insurance contract data and allowing e-payment for insurance services. This is controversial as public sector is trying to set direction for private sector.
	7.6	91	С	The report recommends that Income Tax Cert processing link ITD with DVLD for certain vehicles. No business case or supporting metrics are given to support this IT investment.
	7.6	91	Со	The report advocates changes to ITD's working practices, for example charging payment for ITD certification. MoICT must ensure that it manages change across departments, that is assists DVLD in discussions with ITD to alter their working practices.
	7.6	91	Co	If this change is agreed, a communication link will have to be implemented between ITD and DVLD. The SGN should provide this link.
	8.1.1.2	94	Со	The e-Government centres that were highlighted within the Roadmap paper are supported within this report. MoICT must ensure that this topic is considered and a proper approach defined within its scheduling plan.
	8.5.1	112	С	The back end legacy capability of systems that require major integration is not detailed prior to making design decisions, this must be addressed to ensure validity of technical directions proposed.
	8.5.27	127	Со	A workflow system is proposed that appears to provide very light functionality. No IT requirements are identified for this, this must be reviewed and more details provided.

8.8.5	179	Со	No recommendation is forthcoming for this service for the e-enablement of supporting documentation from dependencies (such as ITD and municipalities). Yet it was previously advocated for the private sector to alter it method of providing data to DVLD. A common approach must be taken for this type of decision.
9.1	187	Со	In response to seeking to improve DVLD's handling of general inquiries, the report suggests implementing a helpdesk function. MoICT might consider leveraging their IT investment in helpdesk technology with DVLD.
9.4	192	Со	The report recommends unifying across government the ability for personal data being updated by all government agencies. It advocates a distributed function to update address information through a central database using National ID number probably controlled by the CSD. This will require at least the ability for DVLD to communicate with CSD and shall also require the development of a common schema for a person/citizen object.
10.1	197	Со	If as is recommended that central CMS is utilised to publish the DVLD static website and that the supporting web network environment is provided to DVLD through the data centre.
10.1	198	С	It is recommended that DVLD should rely upon the Ministry of Finance to provide certain common component services such as a CRM solution. The necessity for these services to be provided by MoF and not MoICT must be established.

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	10.2.1	199	С	Taking the recommendation made in Section 10.1 that the supporting web network environment is provided to DVLD through the data centre, then clarification is required as to why the Phase 1 architecture ascribes the web servers as being under DVLD control.
	10.2.2.1	201	Со	It is stated that an assumption is that all DVLD applications are centralized but the Phase 2 architecture does not highlight any applications (except a generically termed Cobol app) and does not illustrate how centralization should be architectected.
	10.2.3.1	205	Со	The G2G integration proposed within the report requires messaging middleware, integration broker and business process management functionality. The latter solution must be provided at the departmental level (i.e. by DVLD) as this impacts application development, whereas the former two functions shall be provided as common components.
	10.2.4	205	D	The component functional requirements section is very confusing and adds little, for example the requirement for the portal to provide personalization or community based services (message boards). No business requirement is given as to why many if not all these functions are critical to DVLD and as such these decisions must be taken only at the central level and not at the departmental level.
	10.4.2	223	Со	J2EE is recommended as the development framework for DVLD application development.
	11.1.3.2	227	Со	The project PI.2 should consider interacting with MoICT to leverage the SGN infrastructure.
	11.1.3.3	228	С	With regard to the proposed ownership of project PI.3, the responsibility for this rests with MoICT not DVLD.

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	11.1.3.4	229	Со	With regard to the proposed ownership of project PI.4, the responsibility for this rests with MoICT not DVLD.
	11.1.3.5	230	С	Project PI.5 – establishing infrastructure for public Internet website, is given as the responsibility of DVLD. This is not the case as it is recommended within the report to leverage the centrally provided CMS and as such the DVLD will also have to leverage the web server that is inherently linked with the CMS solution (is actually hosted on its own web server).
	11.1.3.6	231	С	Project PI.6 – design/develop a static website for DVLD, omits to mention a critical dependency. MoICT must have published all relevant web guidelines, look and feel standards, information architecture, metadata standards, etc. This must be added. DVLD should adhere to metadata standards.
	11.1.3.7	233	С	Project PI.8 – implement the management of General Inquiries Services, does not specify any costs or any associated software implementations. It would be essential to introduce some form of knowledge base to ensure standard, exact, prompt, etc responses to inquiries.
	11.2. 1	235	Со	Again common components currently not recognized by MoICT are identified in the report, these are a central calendaring system and a SMS gateway. MoICT must update its plans based upon consideration of these additional requirements.
	11.2.4.1	237	Со	A J2EE applications server is recommended for implementation, must ensure that this has buy in by DVLD management and that the decision has been made based upon agreed criteria.

	11.2.4.3	239	С	The report previously recommends this functionality to be provided by a centrally provided component through project CII.1, project PII.3 appears to be a duplication of effort.
	11.2.4.7	244	Со	Project PII.7 – implement payment of taxes via EFT, a slight concern exists with regard to lack of information about legacy DVLD revenue and accounting systems. This should be more extensive.
	11.2.4.8	245	Со	Project PII.8 relates to the e-Government centres as highlighted within the Roadmap strategy document and must be managed and controlled by the MoICT and not DVLD.
	11.2.4.9	246	Co	As above.
	11.2.4.10	247	Со	Project PII.10 should seek to leverage the central call centre IT investment.
	11.2.4.11	248	Со	Project PII.11, PII.13 and PII.16 involves linking government agencies and providing functionality to access discrete agency data sources. This shall require MoICT involvement to leverage the common components to be provided, i.e. SGN, messaging middleware and integration broker.
	11.2.4.20	262	С	Project PII.20 – implement departmental CRM system, is given as the responsibility of DVLD. This is not the case, as multiple implementations of CRM solutions across government is not cost effective particularly at smaller departments such as DVLD.
	11.2.5	263	Со	Project PII.21 involves linking government agencies and providing functionality to access discrete agency data sources. This shall require MoICT involvement to leverage the common components to be provided, i.e. SGN, messaging middleware and integration broker.

	11.3.1	269	С	MoICT has not formally approved many of the central component projects that have been identified within the report.
	11.3.4.11	281	Со	PKI security has not been assured to be implemented by MoICT at this time.
	11.3.4.12	282	Со	The concept being advocated with project PIII.12 is admirable, however the relevant services must be identified and this type of future functionality should be highlighted during the initial phases of service construction.
	11.3.5.3	285	Со	MoICT should consider options in assisting DVLD implementing project PIII.15 with the networking implementation possibly leveraging VPN or gateway technologies here that have been implemented as central components.
	11.3.5.4	286	Со	Project PIII.15 involves linking government agencies and providing functionality to access discrete agency data sources. This shall require MoICT involvement to leverage the common components to be provided, i.e. SGN, messaging middleware and integration broker.
	11.4.2	290	С	The justification for project O.2 must be more clearly established as to why the migration to an alternate platform should occur, essentially some form of business case.